

**METHOD AND SYSTEM FOR PROVIDING OPERATIONS,  
ADMINISTRATION, AND MAINTENANCE CAPABILITIES IN PACKET  
OVER OPTICS NETWORKS**

**ABSTRACT OF THE DISCLOSURE**

5 A method for conveying management information across a network. The  
method includes receiving an Ethernet packet at a network element and modifying  
the packet by inserting a header in place of some or all of an unused portion of a  
preamble within the packet. The header is configured to provide support for  
network management. The method further includes transmitting the modified  
10 packet from the network element. The method may also include examining and  
updating the header at intermediate network elements and examining and  
replacing the header with the preamble at an egress network element.